

ABSTRACT OF DISCLOSURE

The present invention relates to method and apparatus of modulating a series of data words into (d,k) constrained sequence in order to record onto a recording medium. The present method generates, for each data word, a number of alternative sequences by combining mutually different digital words with the data word, calculates for each alternative sequence a digital sum value (DSV) and a penalty based on respective consecutive-zeros sections within the sequence and a joining consecutive "zeros" to a previously-selected sequence, and selects one alternative sequence for recording onto a recordable medium based on the calculated DSV and penalties. Owing to the present invention, DC component of sequences to be recorded onto a recording medium is suppressed and stabilization of a reproduction clock is improved through writing more edge information (i.e., "1"s).